PATENT CLAIMS

1. Method for use in connection with an implant (6) for bone and/or tissue structures, for example the jaw bone, ensuring delivery of bioactive substance to the structure during all or part of the period of incorporation of the implant, characterized in that the implant is designed with an internal space (7) and, if appropriate, one or more channels and/or recesses (22, 23, 24) leading from the internal space to the outside (6a) or outside part of the implant facing towards the structure, in that one or more bodies comprising the bioactive substance are designed to cooperate with the bone and/or tissue structure surrounding the implant so as to be able to release the bioactive substance to the said surrounding structure, and in that the said body or bodies (1) is/are applied in the said space and, if appropriate, also in one or more of the said channels and/or recesses, in order thereby to be exposed to the said surrounding structure and deliver the bioactive substance to the latter during the said period, the bioactive substance being applied before and/or after application of the body (or bodies) in the space (or spaces).

2. Arrangement for use in connection with an implant (6) for bone and/or tissue structure (2), for example the jaw bone, ensuring delivery (3, 4, 5) of bioactive substance to the structure surrounding the implant during all or part of the period of incorporation of the implant in the structure, characterized in that the implant is designed with one or more internal spaces (29, 30) and, if appropriate, one or more channels or recesses which extend from the internal space or spaces to the outside of the implant, in that one or more bodies comprising bioactive substances are designed to cooperate (3, 4, 5) with the surrounding bone and/or tissue structure (2) so as to release the bioactive substance to the surrounding

structure, and in that the body or bodies is/are assigned a position or positions in the space or spaces in which they are exposed for the said cooperation and release.

3. Arrangement according to Patent Claim 2, characterized in that each body (1) is in the form of a spongy body or cloth saturated in or treated with bioactive substance, or a gel which comprises the bioactive substance, and in that the spongy body, the cloth or the gel has a softness which permits distinct application in the space concerned while at the same time ensuring that it is held in place by frictional cooperation, adhesive cooperation, with the inner wall of the respective space.

4. Arrangement according to Patent Claim 2 or 3, characterized in that the implant has clinically effective geometrical properties and has the shape of a cylindrical or conical solid with an outer surface for direct contact with the body tissue (2).

5. Arrangement according to Patent Claim 2, 3 or 4, characterized in that the implant element consists of an absorbable collagen sponge.

6. Arrangement according to any of Patent Claims 2 to 5, characterized in that the bioactive substance is a substance belonging to the superfamily TGF-β.

7. Arrangement according to any of Patent Claims 2 to 6, characterized in that the implant or the implant element has a body part with a threaded outer surface and a conical tip, the said tip having an open section with an axial hole or recess for the said body, which hole or recess is open towards the end surface of the tip part, and one or more through-holes which communicate with the said axial holes and extend radially through the implant body part at right angles to the longitudinal implant axis in order to permit direct release of the bioactive substance from the said body through the said holes or openings.

8. Arrangement according to any of Patent Claims 2 to 7, characterized in that the axial hole extends from

the tipped end part through the main part of the implant body in order to permit release of growth factors along the length of the implant body part through a suitable number of channels or recesses in the wall of the implant or implant element.

9. Arrangement according to any of Patent Claims 2 to 8, characterized in that the design(s) and structure(s) of the body or bodies are chosen on the basis of predetermined release functions.

10. Arrangement according to any of Patent Claims 2 to 9, characterized in that a first body assumes a first position in which the first body is arranged with a first degree of exposure of a certain substance, and a second body assumes a second position in which the second body has a second degree of exposure of the same substance, or of another substance, less than the first degree of exposure, or vice versa, for the purpose of permitting a controlled or optimum release function in the implant situation in question.

11. Arrangement according to any of Patent Claims 2 to 10, characterized in that each body is arranged in such a way that, in the said cooperation and release function, it varies the degree of release of bioactive substance and, for example, effects a greater degree of release at the start of the period than at the end of the period, or vice versa.

12. Arrangement according to any of Patent Claims 2 to 11, characterized in that the design(s) or extent(s) of the space or spaces and any associated channels or recesses are chosen on the basis of a predetermined or anticipated release function.

13. Arrangement according to any of Patent Claims 2 to 12, characterized in that the channels or recesses are arranged with different cross-sectional areas and/or extents, which means that different parts of the same body or different bodies are subject to different degrees of exposure in the release function, for the purpose of permitting a controlled or optimum release function for the bioactive substance or substances.

14. Arrangement according to any of Patent Claims 2 to 13, characterized in that two bodies are situated at a distance from each other in order to serve different parts of the surrounding bone and/or tissue structure.

15. Arrangement according to any of Patent Claims 2 to 14, characterized in that each implant with associated body/bodies can be built up or chosen from a number of implants which vary in respect of the spaces and any recesses and/or channels, and/or from a number of different bodies having different properties in respect of the release function and substances.

16. Arrangement according to any of Patent Claims 2 to 15, characterized in that each body can be introduced into the respective space and, after introduction, can be saturated with bioactive substance, for example by means of an injection needle or a hand pump.

17. Use of an implant which can be fitted in bone and/or tissue structure, for example the jaw bone, ensuring delivery of bioactive substance to the structure surrounding the implant during all or part of the period of incorporation of the implant in the structure, characterized in that the implant is used to support, in one or more internal spaces, one or more bodies comprising the bioactive substance, and to expose the body or bodies to the surrounding structure and, in cooperation with the structure, to release the bioactive substance to the latter.